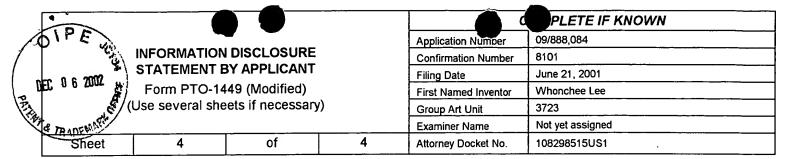
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE **COMPLETE IF KNOWN** 09/888,084 Application Number aubstitute for form 1449A/PTO **ANFORMATION DISCLOSURE** 8101 **Confirmation Number** June 21, 2001 ATEMENT BY APPLICANT Filing Date Whonchee Lee se as many sheets as necessary) First Named Inventor 3723 Group Art Unit Examiner Name 108298515US1 of 1 Attorney Docket No. 1 U.S. PATENT DOCUMENTS Pages, Columns, Lines, Date of Publication of Cited *EXAMINER U.S. Patent Document Name of Patentee or Applicant Where Relevant Passages or INITIALS NUMBER Kind Code of Cited Document Document Relevant Figures Appear (if known) PVV 1/23/01 AA 6,176,992 / Talieh 7/27/99 AB 5,930,699/ **Bhatia** AC Uzoh et al. 9/15/98 5,807,165~ AD AE ΑF AG AΗ ΑI AJ FOREIGN PATENT DOCUMENTS Pages, Columns, Lines, Where Date of Publication of *EXAMINER Foreign Patent Document Name of Patentee or Applicant Relevant Passages or Relevant T Kind Code INITIALS No. of Cited Document Cited Document Figures Appear Office Number (if known) AK ALAM AN AO OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS *EXAMINER Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, Cite Т journal, serial, symposium, catalog, etc.), date, page(s), volume0issue number(s), publisher, city and/or country where published. No. INITIALS SEILCHI KONDO, NORIYUKI SAKUMA, YOSHIO HOMMA, YASUSHI GOTO, NAOFUMI Ohashi, Hizuru Yamaguchi, and Nobuo Owada, "Abrasive-Free Polishing for Copper かりん Damascene Interconnection", Journal of the Electrochemical Society, 147 (10) 3907-3913 (2000) McGraw-Hill, Concise Encyclopedia of Science & Technology, Sybil P. Parker, Editor in Chief, **DVN** Fourth Edition, p. 367, McGraw-Hill, NY, NY, 1992. AO' **DATE CONSIDERED EXAMINER** 6-12-2003 Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to applicant(s).



		OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS							
Examiner Cite Initials* No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.							
DNN	CH/	FRANKENTHAL, R.P. and EATON, D.H., "Electroetching of Platinum in the Titanium-Platinum-Gold Metallization on Silicon Integrated Circuits," <i>Journal of The Electrochemical Society</i> , Vol. 123, No. 5, pp. 703-706, May 1976.							
CJ/		BERNHARDT, A.F., CONTOLINI, R.J., MAYER, S.T., "Electrochemical Planarization for Multi-Level Metallization of Microcircuitry," <i>CircuiTree Journal</i> , Vol. 8, No. 10, pp. 38, 40, 42, 44, 46, and 48, Oct. 1995.							
		HUANG, C.S. et al., "A Novel UV Baking Process to Improve DUV Photoresist Hardness," pp. 135-138.							
	CK /	ATMI Table of Contents, presented at the Semicon West '99 Low Dielectric Materials Technology Conference, July 12, 1999, pp. 13-25.							
	CL /	Micro Photonics, Inc., CSM Application Bulletin, "Low-load Micro Scratch Tester (MST) for characterisation of thin polymer films," http://www.microphotonics.com/mstABpoly.html, 7/25/2002, 3 pages.							
	CM/	Micro Photonics, Inc., "CSM Nano Hardness Tester," http://www.microphotonics.com/nht.html, 7/29/2002, 6 pages.							
/ CN/		PhysicsWorld – Table of Contents, PhysicsWeb, "Hard Materials," http://physicsweb.org/box/world/11/1/11/world-11-1-11-1, 7/29/2002, 1 page.							

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TECHNOLOGY CENTER R3700

EXAMINER

The property of this form with next communication to application (s).

DATE CONSIDERED

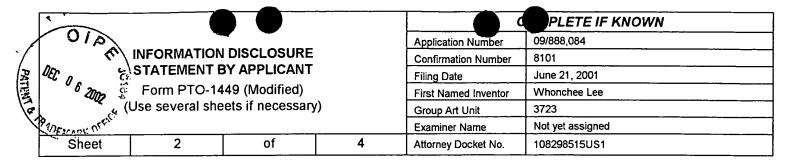
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*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).

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Use several sheets if necessary) 8101 Confirmation Number June 21, 2001 Filing Date First Named Inventor Whonchee Lee 3723 **Group Art Unit** TR INFWARE Not yet assigned **Examiner Name** 3 of 4 Sheet 108298515US1 Attorney Docket No.

				U.S. I	PATENT DOCUMENTS			
Examiner Initials*	Cite No.	NÙMBER	U.S. Patent or Applica	ation Kind Code (if known)	I .	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Whe Relevant Passages or Relevant Figures Appear	
DVN	BO-		6,100,197		Hasegawa	08/08/2000		
	BP/		6,103,628		Talieh	08/15/2000		
	BQ/		6,117,781		Lukanc et al.	09/12/2000		
	BR/		6,143,155		Adams et al.	11/07/2000		
	BS/		6,196,899	B1	Chopra et al.	03/06/2001	DECE	11/
	BT/		6,206,756	B1	Chopra et al.	03/27/2001	RECE	V
	BU/		6,218,309	B1	Miller et al.	04/17/2001	DEC - 9	7002
	BV/		6,250,994	B1	Chopra et al.	06/26/2001	TECHNOLOGY C	CENTEP
	BW∠		6,273,786	B1	Chopra et al.	08/14/2001	The state of the s	
	BX /		6,276,996	B1	Chopra	08/21/2001		
	BY/		6,287,974	B1	Miller	09/11/2001		
	BZ/		6,313,038	B1	Chopra et al.	11/06/2001		
	CA/		6,328,632	B1	Chopra	12/11/2001		
	СВ		6,368,190	B1	Easter et al.	04/09/2002		
	<u></u>	<u> </u>		FOREIG	N PATENT DOCUMENTS			
Examiner	Cite No.	Office	Foreign Patent or Applic	ication Kind Code (if known)		Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т .
DV W	CC/	WO	00/26443		Talieh	05/11/2000		
1	CD/	wo	00/28586		Chopra	05/18/2000		
	CE/	wo	00/32356		Talieh	06/08/2000		
	CF/	wo	00/59008		Talieh	10/05/2000		
- J	CG	wo/	00/59682		Talieh	10/12/2000		
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Examiner Initials*	Cite No.				CAPITAL LETTERS), title of the article (v ymposium, catalog, etc.), date, page(s), vo and/or country where published.			_T

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		U.S. P	ATENT DOCUMENTS	Date of	
Examiner Initials*	Cite No.	U.S. Patent or Application Kind Code NUMBER (if known)	Name of Patentee or Inventor of Cited Document	Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
hud	AP/	5,575,885	Hirabayashi et al.	11/19/1996	
	AQ/	5,618,381	Doan et al.	04/08/1997	
	AR/	5,676,587	Landers et al.	10/14/1997	
	AS/	5,681,423	Sandhu et al.	10/28/1997	
	AT/	5,780,358	Zhou et al.	07/14/1998	
	AU,	5,840,629	Carpio	11/24/1998	RECEIVED
	AV/	5,846,398	Carpio	12/08/1998	DEC - 9 2002
	AW/	5,863,307	Zhou et al.	01/26/1999	TECHNOLOGY CENTER RS
	AX/	5,897,375	Watts et al.	04/27/1999	
	AY/	5,934,980	Koos et al.	08/10/1999	
	AZ/	5,954,975	Cadien et al.	09/21/1999	
	BA.	5,954,997	Kaufman et al.	09/21/1999	
210	BB/	5,972,792	Hudson	10/26/1999	
	BC/	6,001,730	Farkas et al.	12/14/1999	
	BD /	6,010,964	Glass	01/04/2000	
	BE/	6,039,633	Chopra	03/21/2000	
	BF/	6,046,099	Cadien et al.	04/04/2000	
	BG/	6,051,496	Jang	04/18/2000	
	BH/	6,060,386	Givens	05/09/2000	
	BI /	6,060,395	Skrovan et al.	05/09/2000	
	BJ /	6,063,306	Kaufman et al.	05/16/2000	
	BK/	6,066,030	Uzoh	05/23/2000	
	BL/	6,066,559	Gonzalez et al.	05/23/2000	
	BM/	6,068,787	Grumbine et al.	05/30/2000	
\downarrow	BN/	6,083,840	Mravic et al.	07/04/2000	

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*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).

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		U.S	PATENT DOCUMENTS		
Examiner Initials*	Cite No.	U.S. Patent or Application Kind Connumber (if known)		Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
PNY	AA.	U.S. Application No. 09/651,779 / (Atty. Docket No. 10829.8515US)	Moore	Filed 08/30/2000	
	AB/	U.S. Application No. 09/651,808 (Atty. Docket No. 4373US)	Chopra et al.	Filed 08/30/2000	
	AC-	U.S. Application No. 09/653,392 (Atty. Docket No. MTI-31044)	Chopra et al.	Filed 08/31/2000	
	AD	U.S. Application No. 09/887,767 (Atty. Docket No. 10829.8515US2)	Lee et al.	Filed 06/21/2001	
	AE/	U.S. Application No. 09/888,002 (Atty. Docket No. 10829.8515US3)	Lee et al.	Filed 06/21/2001	RECEIVED DEC - 9 2002
	AF/	U.S. Application No. 10/230,463 (Atty. Docket No. 10829.8672US)	Lee et al.	Filed 08/29/2002	TECHNOLOGY CENTER R3
	AG/	U.S. Application No. 10/230,602 (Atty. Docket No. 10829.8674US)	Chopra	Filed 08/29/2002	
	AH/	U.S. Application No. 10/230,628 (Atty. Docket No. 10829.8673US)	Lee et al.	Filed 08/29/2002	
	Al.	U.S. Application No. 10/230,970 (Atty. Docket No. 10829.8515US6)	Lee et al.	Filed 08/29/2002	
	AJ/	U.S. Application No. 10/230,972 (Atty. Docket No. 10829.8515US7)	Lee et al.	Filed 08/29/2002	
	AK/	U.S. Application No. 10/230,973 (Atty. Docket No. 10829.8515US8)	Lee et al.	Filed 08/29/2002	
	AL.	4,839,005	Katsumoto et al.	06/13/1989	
	AM/	5,244,534	Yu et al.	09/14/1993	
j	AN/	5,300,155	Sandhu et al.	04/05/1994	
Ų.	AO/	5,567,300	Datta et al.	10/22/1996	

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*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).

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Examiner Initials*	Cite No.	U.S.	Patent or A	pplication Kind Coc (if know		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Line Where Relevant Passage Relevant Figures Appe	es or
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					FOF	REIGN PATENT DOCUMENTS			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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	First Named Inventor	Whonchee Lee
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DVN	.,,,,		20010036746/	Α		Sato et al.	11/01/2001		
			20020052126/	Α	.1	Lee et al.	05/02/2002	RECEIVE	7
		:	20020070126/	Α	.1	Sato et al.	06/13/2002	RECEIVE MAY 0 6 2003	5
			5,911,619/			Uzoh et al.	06/15/1999	ECHNOLOGY CENTER R3	
			6,033,953/			Aoki et al.	03/07/2000	CENTER R3	700
			6,121,152/			Adams et al.	09/19/2000		
			6,171,467/	В	31	Weihs et al.	01/09/2001		
-			6,187,651/	В	31	Oh	02/13/2001		
				FO	RE	IGN PATENT DOCUMENTS			
Examiner Initials*	Cite No.	Foreign Patent or Application Kind Code Office NUMBER (if known)			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T	
>VV√	110.	EP	0459397/	A2, A		Kabushiki Kaisha Toshiba	12/04/1991		
1		JP 2001077117/ A1			Sony Corp.	03/23/2001			
		wo	02/064314/	A1		Speedfam-IPEC Corporation	08/22/2002		
		<u>. </u>	OTHER PR	OR AR	1-TS	NON PATENT LITERATURE D	OCUMENTS		
Examiner Initials*	Cite No.		Include name (book, magazine,	of the au journal, s	ithor erial,	(in CAPITAL LETTERS), title of the article (w, symposium, catalog, etc.), date, page(s), vo and/or country where published.	hen appropriate), title lume issue number(s)	of the item , publisher, city	Т
yu/		for M				RK, IBM Technical Disclosul Vol. 17, No. 1, pp. 271-272,			
		Shap	ABOAF, J.A. and R.W. BROADIE, IBM Technical Disclosure Bulletin, Rounding of Square-Shape Holes in Silicon Wafers, Vol. 19, No. 8, p. 3042, January 1977, XP-002235690, NN 77013042.						
		BAS: Silico	BASSOUS, E., IBM Technical Disclosure Bulletin, Low Temperature Methods for Rounding Silicon Nozzles, Vol. 20, No. 2, July 1977, pp. 810-811, XP-002235692, NN 7707810.						
			International Se h 31, 2003.⁄	arch F	₹ер	oort, International Application	Number PCT	/US02/19495,	
J		1	International Se 4, 2003. /	arch F	⋜ер	oort, International Application	Number PCT	7/U\$02/19496,	

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